

PRODUCT INFORMATION



PD-L1 Extracellular Domain (human, recombinant)

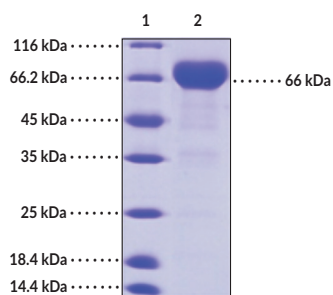
Item No. 28378

Overview and Properties

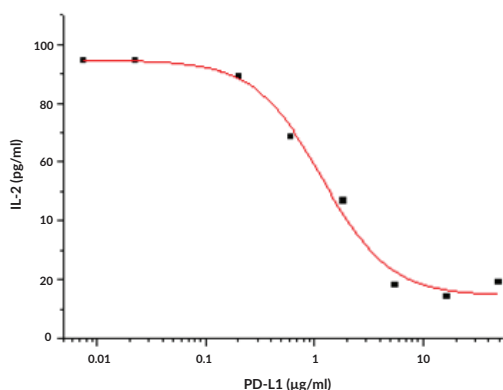
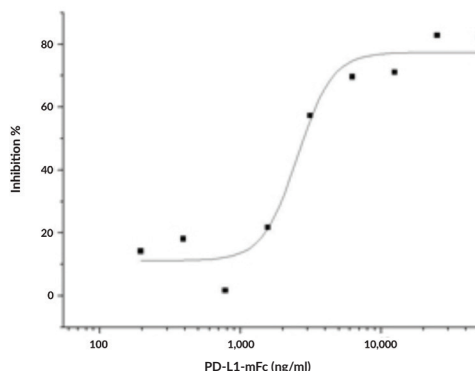
Synonyms:	B7-H1, CD274, PDCD1 Ligand 1, Programmed Cell Death 1 Ligand 1
Source:	Recombinant C-terminal mouse IgG1 Fc-tagged human PD-L1 expressed in HEK293 cells
Amino Acids:	19-239
Molecular Weight:	51.7 kDa
Storage:	-80°C (as supplied)
Stability:	≥1 year
Purity:	≥95% estimated by SDS-PAGE
Supplied in:	Lyophilized from 20 mM Tris, pH 8.5, with 150 mM sodium chloride and 10% glycerol
Bioactivity:	See figures for details

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Images



Lane 1: MW Markers
Lane 2: PD-L1 Extracellular Domain



WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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Description

Programmed cell death 1 ligand 1 (PD-L1), also known as B7-H1 or CD274, is a B7 family protein that is involved in regulation and attenuation of the adaptive immune response and peripheral T cell tolerance.¹⁻⁴ It is a 290-amino acid type I transmembrane protein encoded by the *CD274* gene in humans and is comprised of a 239-amino acid extracellular domain consisting of a signal peptide, an IgV-like domain, and an IgC-like domain, a transmembrane domain, and a cytoplasmic tail.^{1,5} PD-L1 is constitutively expressed in T and B cells, dendritic cells, macrophages, and regulatory T cells (Tregs), as well as a variety of nonhematopoietic cells, and is upregulated by IFN- γ .³ Binding of PD-L1 to its receptor, programmed cell death protein 1 (PD-1), suppresses T cell proliferation, migration, and cytokine production.^{2,4} PD-L1 is also aberrantly expressed in a variety of tumor cells, and expression of PD-L1 in tumor tissue is associated with poor prognosis in patients with renal cell carcinoma.⁶⁻⁸ Formulations containing PD-L1 blocking antibodies have been used in the treatment of a variety of cancers. Cayman's PD-L1 Extracellular Domain (human, recombinant) protein can be used for ELISA, binding assay, and cell-based assay applications. This protein is a disulfide-linked homodimer. The reduced monomer, comprised of PD-L1 (amino acids 19-239) fused to mouse IgG1 Fc at its C-terminus, consists of 455 amino acids, has a calculated molecular weight of 51.7 kDa, and a predicted N-terminus of Phe19 after signal peptide cleavage. As a result of glycosylation, the monomer migrates at approximately 66 kDa by SDS-PAGE under reducing conditions.

References

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